(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 4 November 2004 (04.11.2004)

PCT

(10) International Publication Number WO 2004/094766 A3

(51) International Patent Classification⁷: E21B 23/01

. . .

(21) International Application Number:

PCT/US2004/011973

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/463,586

17 April 2003 (17.04.2003) US

(71) Applicant (for all designated States except US): ENVENTURE GLOBAL TECHNOLOGY [US/US]: 16200 A. Park Row, Houston, TX 77084 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): BRISCO, David, Paul [US/US]; 405 Westridge Drive, Duncan. OK 73533 (US). WATSON, Brock, Wayne [US/US]; 2535 Marsh Lane #1004. Carrollton, TX 75006 (US). TREECE, Harold [US/US]; 213 Ridgecrest Drive, Duncan, OK 73533 (US).

(74) Agent: MATTINGLY, Todd: Haynes and Boone, LLP, 901 Main Street, Suite 3100, Dallas, TX 75202 (US).

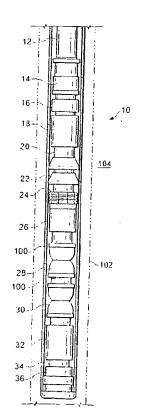
(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, H., IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: APPARATUS FOR RADIALLY EXPANDING AND PLASTICALLY DEFORMING A TUBULAR MEMBER

(57) Abstract: An apparatus for radially expanding and plastically deforming a tubular (100).



BEST AVAILABLE COPY

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/11973

A. CLASSIFICATION OF SUBJECT MATTER			
JPC(7) : E21B 23/01			
US CL : 166/298, 55.7			
According to International Patent Classification (IPC) or to both national classification and IPC			
B. FIELDS SEARCHED			
Minimum documentation concluded (Alexis and Alexis and			
Minimum documentation searched (classification system followed by classification symbols) U.S.: 166/298, 55.755, 55.6, 297; 405/184.3			
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched			
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST			
C. DOCUMENTS CONSIDERED TO BE RELEVANT			
Category * Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No.			
X	US 5 306 101 A (Park)	e appropriate, of the relevant passages	Relevant to claim No.
^	US 5,306,101 A (Rockower et al.) 26 April 1994	(26.04.1994), sec entire document.	I, 13, 26 and 41
Х	US 6,325,148 B1 (Trahan et al.) 4 December 2001 (04.12.2001), see entire document. 50, 59-67, 70 and 73		50, 59-67, 70 and 72
P,X	US 6,598,678 B1 (Simpson et al.) 29 July 2003 (2	9.07.2003), see entire document.	1-75
	·.		
Further documents are listed in the continuation of Box C. See patent family annex.			
Spe	cial categories of cited documents:		
'A" document defining the general state of the art which is not considered to be of particular relevance		"T" later document published after the internation date and not in conflict with the application principle or theory underlying the invention	on hist cited to the death of the
	cation or patent published on or after the international filing date	"X" document of particular relevance; the clair considered novel or cannot be considered when the document is taken alone	med invention cannot be to involve an inventive step
L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)		"Y" document of particular relevance: the claim	nied invention cannot be
	ferring to an oral disclosure, use, exhibition or other means	considered to involve an inventive step wh with one or more other such documents, so obvious to a person skilled in the art	en the document is combined uch combination being
priority date	-	"&" document member of the same patent fami	ily
ate of the actual completion of the international search		Date of mailing of the international search r	report
8 August 2005 (18.08.2005)		27 SEP 2005	-64.1
ame and mailing address of the ISA/US		(Asthorized officer	
Mail Stop PCT, Attn: ISA/US		1 W. L. L. O.D. v. and l.	
Commissioner for Patents P.O. Box 1450		David Bagnell Communication	}
Alexandria, Virginia 22313-1450		Telephone No. 571-272-3600	
csimile No. (703) 305-3230			
m PCT/ISA/210 (second sheet) (January 2004)			
	, , , , , , , , , , , , , , , , , , ,		